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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 803,084	03 08 2001	Thomas P. Glenn	G0049	8517

Serge J. Hodgson
Gunnison, McKay & Hodgson, L.L.P.
1900 Garden Road, Suite 220
Monterey, CA 93940

EXAMINER

WILLIAMS, ALEXANDER O

ART UNIT PAPER NUMBER

2826

DATE MAILED: 07 08 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/803,084

Applicant(s)

GLENN ET AL

Examiner

Alexander O Williams

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 10 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 6) ☐ Other:

Art Unit: 2826

Serial Number: 09/803084 Attorney's Docket #: G0049

Filing Date: 3/8/2001:

Applicant: Glenn et al.

Examiner: Alexander Williams

Applicant's Amendment/election of Group I (claims 1 to 15 and 23 to 25) in Paper # 7, filed 4/10/03, has been acknowledged.

This application contains claims 16 to 22 and 26 to 29 drawn to an invention non-elected without traverse in Paper No. 7.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The disclosure is objected to because of the following informalities: Applicant's related application information should be updated.

Appropriate correction is required.

Claims 7 and 36 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 7 and 36, it is unclear and confusing to what is meant by "a **flat** extending in said second direction."

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 to 29 and 32 to 40, **insofar as claims 7 and 36 can be understood**, are rejected under 35 U.S.C. § 102(b) as being anticipated by Walker et al. (U.S. Patent # 6,275,277 B1).

1. Walker et al. (figures 1 to 39) specifically figures 16 to 28 show a wafer **115** comprising: a first surface (**top of 115**); a second surface (**bottom of 115**); a first scribe line **255** coupled to said first surface, said first scribe line extending in a first direction; a second scribe line **260** coupled to said first surface, said second scribe line extending in a second direction perpendicular to said first direction; and, a first alignment mark (**point where 260 and 255 meet**) formed at an intersection of said first scribe line and said second scribe line, said first alignment mark extending from said first surface to said second surface.

Art Unit: 2826

2. The wafer of Claim 1, Walker et al. further comprising a scribe grid **265** comprising said first scribe line and said second scribe line.
3. The wafer of Claim 2, Walker et al. further comprising electronic components **155** delineated by said scribe grid.
4. The wafer of Claim 3 Walker et al.'s electronic components **155** are selected from the group consisting of integrated circuits, micromachine chips and image sensor chips.
5. The wafer of Claim 3 Walker et al.'s electronic components **155** comprise bond pads coupled to said first surface (inherit).
6. The wafer of Claim 3 Walker et al.'s electronic components **155** comprise active areas coupled to said first surface (inherit).
7. The wafer of Claim 1 Walker et al. further comprising a flat extending in said second direction.
8. The wafer of Claim 1 Walker et al.'s first scribe line delineates a first electronic component **155** from a second electronic component.
9. The wafer of Claim 8 Walker et al.'s second scribe line delineates said second electronic component **155** from a third electronic component **155**.
10. The wafer of Claim 1 Walker et al.'s first alignment mark is an aperture (**see figure 28**).
11. The wafer of Claim 1 Walker et al. further comprising a first plurality of alignment marks (**intersection of 255 and 260**) comprising said first alignment mark, said first plurality of alignment marks extending from said first surface to said second surface.
12. The wafer of Claim 11 Walker et al.'s first plurality of alignment marks **265** are aligned with said first scribe line.
13. The wafer of Claim 12 Walker et al. further comprising a second plurality of alignment marks **260** aligned with a third scribe line coupled to said first surface and extending in said second direction.
14. The wafer of Claim 11 Walker et al.'s first plurality of alignment marks **255** define a first line, said first line being aligned with said first scribe line.
15. The wafer of Claim 14 Walker et al. further comprising a second plurality of alignment marks **260** defining a second line, said second line being aligned with a third scribe line coupled to said first surface and extending in said second direction.
23. Walker et al. (figures 1 to 39) specifically figures 16 to 28 show a wafer **115** comprising: a first surface (**top of 115**); a second surface (**bottom of 115**); a scribe grid **265** coupled to said first surface; and a plurality of alignment marks (**intersection of 265s or 260 and 255**) extending from said first surface to said second surface, said plurality of alignment marks having a positional relationship to said scribe grid.
24. The wafer of Claim 23, Walker et al.'s scribe grid comprises a horizontal scribe line, a first set of said plurality of alignment marks being aligned with said horizontal scribe line.
25. The wafer of Claim 24, Walker et al.'s scribe grid comprises a vertical scribe line, a second set of said plurality of alignment marks being aligned with said vertical scribe line.
32. The wafer of Claim 23 Walker et al. further comprising electronic components delineated by said scribe grid.

Art Unit: 2826

33. The wafer of Claim 32, Walker et al.'s electronic components **155** are selected from the group consisting of integrated circuits, micromachine chips and image sensor chips.
34. The wafer of Claim 32, Walker et al.'s electronic components **155** comprise bond pads coupled to said first surface (inherit).
35. The wafer of Claim 32, Walker et al.'s electronic components **155** comprise active areas coupled to said first surface (inherit).
36. The wafer of Claim 25, Walker et al.'s vertical scribe line extends in a first direction and wherein said horizontal scribe line extends in a second direction, said wafer further comprising a flat extending in said second direction.
37. Walker et al. (figures 1 to 39) specifically figures 16 to 28 show a wafer **115** comprising: a front-side surface (**top surface of 115**); a back-side surface (**bottom surface of 115**); a first scribe line **255** coupled to said front-side surface; and a first back-side alignment mark extending from said front-side surface to said back-side surface, said first backside alignment mark being formed along said first scribe line (**see figure 28**).
38. The wafer of Claim 37, Walker et al. further comprising a plurality of back-side alignment marks extending from said front-side surface to said back-side surface, said plurality of back-side alignment marks comprising said first back-side alignment mark.
39. The wafer of Claim 38, Walker et al. plurality of back-side alignment marks have a positional relationship to said first scribe line.
40. Walker et al. (figures 1 to 39) specifically figures 16 to 28 show a wafer **115** comprising: a first surface (**top surface of 115**); a second surface (**bottom surface of 115**); a scribe line **265** coupled to said first surface; and a means (**intersection of 255 and 260**) for determining a position of said scribe line from said second surface, said means for determining extending through said wafer from said first surface to said second surface.

Initially, and with respect to claims 2 and 23, note that a "product by process" claim is directed to the product per se, no matter how actually made, In re Hirao, 190 USPQ 15 at 17 (footnote 3). See also In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Wertheim, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); In re Fitzgerald, 205 USPQ 594, 596 (CCPA); In re Marosi et al., 218 USPQ 289 (CAFC); and most recently, In re Thorpe et al., 227 USPQ 964 (CAFC, 1985) all of which make it clear that it is the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that, as here, an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Note that Applicant has burden of proof in such cases as the above case law makes clear.

Claims 30 and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Walker et al. (U.S. Patent # 6,275,277 B1).

30. The wafer of Claim 2, Walker et al.'s scribe grid comprises an etched silicon oxide layer.

Art Unit: 2826

31. The wafer of Claim 23, Walker et al.'s scribe grid, comprises an etched silicon oxide layer.

As to the grounds of rejection under section 103, see MPEP § 2113.

The following references are cited as of interest to this application, but not applied at this time.

Field of Search	Date
U.S. Class and subclass: 257/797,620,618,226,59,72,644,650	6/29/03
Other Documentation: foreign patents and literature in 257/797,620,618,226,59,72,644,650	6/29/03
Electronic data base(s): U.S. Patents EAST	6/29/03

Papers related to this application may be submitted to Technology Center 2800 by facsimile transmission. Papers should be faxed to Technology Center 2800 via the Technology Center 2800 Fax center located in Crystal Plaza 4-5B15. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center 2800 Fax Center number is (703) 308-7722 or 24. Only Papers related to Technology Center 2800 APPLICATIONS SHOULD BE FAXED to the GROUP 2800 FAX CENTER.

Any inquiry concerning this communication or any earlier communication from the examiner should be directed to ***Examiner Alexander Williams*** whose telephone number is **(703) 308-4863**.

Art Unit: 2826

Any inquiry of a general nature or relating to the status of this application should be directed to the **Technology Center 2800 receptionist** whose telephone number is **(703) 308-0956**.

6/29/03

A handwritten signature in black ink, appearing to read 'Alexander O. Williams', with a long, sweeping flourish extending upwards and to the right.

Primary Patent Examiner
Alexander O. Williams